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Book reviews and notices*

Abstract—Books reviewed include: *Basidiomycetes*—The fungal flora in southwestern Japan: agarics and boletes (Terashima with Takahashi & Taneyama (eds) 2016); General—Atlas of Chinese macrofungal resources (Li, Li, Yang, Tolgor & Dai 2015).

Basidiomycetes

The fungal flora in southwestern Japan: agarics and boletes. By Y. Terashima (supervisor), H. Takahashi and Y. Taneyama (eds). 2016. Tokai University Press, 4-1-1 Kitakaname, Hiratsuka-sh kanagawa 259-1292, Japan. ISBN 978-4-486-02085-1. In English and Japanese. i-xii, 351 pp, 283 figs. Price: ¥ 11,000.

This beautifully executed book gives descriptions of 35 mushroom species that were found in the Ryukyu Islands (Okinawa prefecture), which stretch from Taiwan to Kyūshū. The climate of these islands is humid subtropical in the north to tropical rainforest in the south, and the vegetation reflects that on mainland Asia.

A very short introduction to the area and the methods used in the book are followed by the taxonomic part in which the species are treated. Besides extensive and thorough morphological descriptions, the outstanding colour photographs, and line drawings of high to low quality, ITS or LSU sequence analyses are provided for many (not all) species. The authors describe 21 taxa as new. Literature references follow the species descriptions, and an index to the species is given at the end. The whole book is bilingual, with all text available in English and Japanese.

This book is a great addition to the knowledge of the mycoflora of the Ryukyu Islands.

* Book reviews or books for consideration for coverage in this column should be sent to the *Editor-in-Chief* at editor@mycotaxon.com or 6720 NW Skyline, Portland OR 97229 USA.

It is a huge step forward to see molecular data also included in this floristic approach, although this is not the first of such efforts (e.g., Desjardin & Perry 2016 for *Hypholoma* from São Tomé and Principe).

However, no explanation is provided for the selection of taxa for comparison of the mycenoid taxa in the phylogenetic analyses, and the same phylogenetic tree is reproduced seven times for various new mycenoid taxa.

Unfortunately, the names applied to the species, the generic placement of the new taxa, and the lack of comparisons with existing literature reduce the value of this book considerably. Some examples:

The newly described *Aureoboletus liquidus* is identical, in LSU sequence and morphology, to *Boletellus longicollis*. *Boletus virescens,* which is clearly a member of the xerocomoid clade, is placed in *Boletus*. The *Cruentomycena orientalis* ITS sequence is 99% identical with that of *C. kedrovayae* from coastal eastern Russia, northeast of Korea, and morphological differences between the two taxa are subtle to non-existent. The two new species *Marasmiellus lucidus* and *M. venosus,* which have very similar ITS sequences, belong in the *Neonothopanus/Omphalotus* lineage, not in *Marasmiellus,* and should be compared with *Neonothopanus nambi*. *Micropsalliota cornuta* refers to *Agaricus crocopeplus*, and it is very likely that the newly described *Mycena comata* was earlier described as *M. auricoma* by one of its authors in 1999 (Takashi 1999). *Mycena flammifera* is clearly the same as *Filoboletus manipularis*, and *M. luxfoliata* has morphological and molecular characters that fit the genus *Resinomycena*. It should also be noted that *Pleurotus* is not known for bioluminescence, and the placement of the new bioluminescent species *Pl. nitidus* in this genus should be reconsidered.

With the available sequence data these mistakes could easily have been prevented; this reviewer is not an expert on any of these groups, but by simply applying BLAST to the sequences, comparing the phylogenetic trees, and critically comparing descriptions and reading the literature, these conclusions could be drawn.

In short, a beautiful book filled with information about 35 southeast Asian mushroom species, of which a number are unfortunately misnamed.

Desjardin DE, Perry BA. 2016. Dark-spored species of *Agaricineae* from Republic of São Tomé and Príncipe, West Africa. Mycosphere 7: 359–391. http://dx.doi.org/10.5943/mycosphere/7/3/8

Takahashi H. 1999. *Mycena auricoma*, a new species of *Mycena* section *Radiatae* from Japan, and *Mycena spinosissima*, a new record in Japan. Mycoscience 40: 73–80.

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General

Atlas of Chinese macrofungal resources. By Y. Li, T.H. Li, Z.L. Yang, B. Tolgor, and Y.C. Dai. 2015. National Publication Foundation. ISBN 978-7-5542-1256-1. 1351 pp, numerous colour photos. Price CNY £1480.00 [in Chinese, with Latin names]

There is only one word fit for this book: monumental. It weighs at least 5 kg, is 243 x 315 x 65 mm, has a soft cover and comes in a fancy box, and most importantly gives photos and short descriptions of 1819 species of fungi occurring in China.

The text of this book is in Chinese, and only a very brief introduction and chapter headings are in English.

A short history of mycology in China, an overview of classification of fungi, and a long chapter on different regions and vegetation types in China precede a pictorial key to different fungal types and their microscopical characters, a brief mention of the cultivated species, and then the classification used in this book followed by the bulk consisting of pages of photos, alphabetical by group, and concluded by a glossary, list of references, and indices to the species.

Because the team of authors is expert in different fungal groups, ascomycetes, polypores, and agarics are very well represented. Many species are depicted with multiple photos, with some photos spanning two pages, and they are in general of high quality. All species are apparently vouchered. Many have not been illustrated before, and a high number of species described from China are included, of which 260 were authored by one or more of this volume's authors. It was fascinating for me to see pictures of *Lepiota shixingensis* and *L. squamulosa*.

Of course, in a book of this size, there are mistakes. Some species are clearly misidentified. The photo of *Mycena sanguinolenta* in fact shows *M. haematopus;* the two *Cystolepiota seminuda* photos show a specimen with a relatively thick stipe, and I doubt that this is the same as the species described from Europe; *Baeospora myosura* from Europe is characterized by very crowded lamellae, but the number of lamellae shown in the Chinese specimen is quite low; the species depicted here as *Loreleia postii* has big, yellow-orange-brown fruitbodies, but the European species has small orange fruitbodies with pale lamellae and always grows on thallose liverworts. Finally, the genus *Pluteus* definitely needs more work in China, as *P. umbrosus* is presented several times under different names, and the *P. plautus* group needs re-assessment in general (not just in China). One of the obvious textual mistakes is the author reference for *Leucopholiota lignicola*.

Some photos really stand out: the *Pluteus thomsonii* specimen shows the most spectacularly veined pileus I've ever seen. *Clitopilus crispus* is fascinating with its irregular pileus margin and ridges. And, of course the many *Cordyceps* (s.l.) species are always awe-inspiring.

Another huge achievement of this book: the polypores are very well represented, undoubtedly thanks to the fifth author and his work.

It is really nice that photos of mushrooms in cultivation are included as well; very impressive is the field of bags with *Auricularia heimuer*! Photos of *Hericium erinaceus* in the field and in cultivation are very nice for comparison.

And lastly, some larger plant pathogenic fungi, such as corn smut (*Ustilago maydis*), *U. esculenta*, *Gymnosporangium asiaticum* on *Juniperus* and a rosaceous host, and *Sclerotinia* on sunflower, are presented.

I'll spend lots of time looking through this book, and although I cannot read Chinese, I can certainly enjoy the photos and learn the names of the many taxa I have never seen in my life.

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Book Announcements

***Agaricus* of North America.** By R.W. Kerrigan, 2016. Memoirs of The New York Botanical Garden Volume 114. New York Botanical Garden Press, <www.nybgpress.org>. ISBN 978-0-89327-536-5. Price $127.99.

***Hebeloma* (Fr.) P. Kumm.** By H.J. Beker, U. Eberhardt & J. Vesterholt†, 2016. Fungi Europaei 14. Candusso Edizioni, <www.edizionicandusso.it>. ISBN 978-88-96059-42-5. pp. 1232, many colour photos. Price € 86.00.

Mushrooms of the Redwood Coast. A comprehensive guide to the fungi of coastal northern California. By N. Siegel & C. Schwarz, 2016. Ten Speed Press, Berkeley, <www.tenspeed.com>. ISBN 978-1-60774-817-5. pp. 601, many colour photos. Price US $35.00.